



## 40 CFR Part 241

[EPA–HQ–OLEM-2020-0550; 7815-02-OLEM]

RIN 2050-AH13

### Petition to Revise the Non-Hazardous Secondary Material Standard: Proposed Response

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notification of tentative response to petition for rulemaking.

**SUMMARY:** The Environmental Protection Agency (EPA or “the Agency”) is responding to a rulemaking petition from American Forest and Paper Association et al. (“the petition”)

requesting amendments to the Non-Hazardous Secondary Materials (NHSM) regulations, initially promulgated on March 21, 2011, and amended on February 7, 2013, February 8, 2016, and February 7, 2018 under the Resource Conservation and Recovery Act (RCRA). The NHSM regulations establish standards and procedures for identifying whether non-hazardous secondary materials are solid wastes when legitimately used as fuels or ingredients in combustion units.

The petition requested the following amendments: Change the legitimacy criterion for comparison of contaminants in the NHSM to the traditional fuel the unit is designed to burn from mandatory to “should consider”; remove associated designed to burn and other limitations for creosote-treated railroad ties (CTRT); and revise the definition of ‘paper recycling residuals’ (PRR) to remove the limit on non-fiber materials in PRR that can be burned as a non-waste fuel.

The EPA is proposing to deny the requested amendments. In addition, as an alternative to granting the third request, EPA is proposing a change to the definition of PRR to set a numerical limit on the amount of non-fiber materials that may be included for the residuals to be considered a non-waste fuel.

**DATES:** Comments must be received on or before [Insert date 60 days after publication in the Federal Register]

**ADDRESSES:** You may send comments, identified by Docket ID No. EPA–HQ–OLEM-2020-0550, by any of the following methods:

- Federal eRulemaking Portal: <https://www.regulations.gov/> (our preferred method).

Follow the online instructions for submitting comments.

- Mail: U.S. Environmental Protection Agency, EPA Docket Center, OLEM Docket, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.
- Hand Delivery or Courier (by scheduled appointment only): EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. The Docket Center's hours of operations are 8:30 a.m. – 4:30 p.m., Monday – Friday (except Federal Holidays).

*Instructions:* All submissions received must include the Docket ID No. for this rulemaking.

Comments received may be posted by the Agency without change to

<https://www.regulations.gov/>, including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the “Public Participation” heading of the SUPPLEMENTARY INFORMATION section of this document. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are open to the public by appointment only to reduce the risk of transmitting COVID-19. Our Docket Center staff also continues to provide remote customer service via email, phone, and webform. Hand deliveries and couriers may be received by scheduled appointment only. For further information on EPA Docket Center services and the current status, please visit us online at <https://www.epa.gov/dockets>.

**FOR FURTHER INFORMATION CONTACT:** Tracy Atagi, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, MC 5303P, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: 202-566-0511; email address: [atagi.tracy@epa.gov](mailto:atagi.tracy@epa.gov).

**SUPPLEMENTARY INFORMATION:**

The following outline is provided to aid in locating information in this preamble.

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  - G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
  - H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
  - I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
  - J. National Technology Transfer and Advancement Act (NTTAA)
  - K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

## **I. General Information**

### *A. List of abbreviations and acronyms used in this proposed rule*

Btu	British thermal unit
CAA	Clean Air Act
CBI	Confidential business information
CFR	Code of Federal Regulations
CISWI	Commercial and Industrial Solid Waste Incinerator
CTRT	Creosote-treated railroad ties
EPA	U.S. Environmental Protection Agency
FR	<i>Federal Register</i>

HAP	Hazardous air pollutants
MACT	Maximum achievable control technology
NAICS	North American Industrial Classification System
ND	Non-detect
NESHAP	National emission standards for hazardous air pollutants
NHSM	Non-hazardous secondary material
OMB	Office of Management and Budget
PAH	Polycyclic aromatic hydrocarbons
ppm	Parts per million
PRR	Paper Recycling Residuals
RCRA	Resource Conservation and Recovery Act
RIN	Regulatory information number
SBA	Small Business Administration
SO <sub>2</sub>	Sulfur dioxide
SVOC	Semi-volatile organic compound
U.S.C.	United States Code
VOC	Volatile organic compound

*B. What is the statutory authority for this proposed rule?*

The EPA is proposing to deny the requested revisions in the AF&PA petition and is proposing regulatory revisions to the definition of paper recycling residuals under the authority of sections 2002(a)(1) and 1004(27) of the Resource Conservation and Recovery Act (RCRA), as amended, 42 U.S.C. 6912(a)(1) and 6903(27). Section 129(a)(1)(D) of the Clean Air Act (CAA) directs the EPA to establish standards for Commercial and Industrial Solid Waste Incinerators (CISWI), which burn solid waste. Section 129(g)(6) of the CAA provides that the term “solid waste” is to be established by the EPA under RCRA (42 U.S.C. 7429(g)(6)). Section 2002(a)(1)

of RCRA authorizes the Agency to promulgate regulations as are necessary to carry out its functions under the Act. The statutory definition of “solid waste” is stated in RCRA section 1004(27).

*C. Does this proposed rule apply to me?*

Categories and entities potentially affected by this action, either directly or indirectly, include, but may not be limited to the following:

<b>Generators and Potential Users<sup>a</sup> of Categorical Non-Waste Fuels</b>	
<b><i>Primary Industry Category or Subcategory</i></b>	<b><i>NAICS<sup>b</sup></i></b>
Utilities	221
Manufacturing	31, 32, 33
Wood Product Manufacturing	321
Sawmills	321113
Wood Preservation (includes railroad tie creosote treating)	321114
Paper Manufacturing	322
Cement Manufacturing	32731
Rail Transportation (includes line haul and short line)	482
Scenic and Sightseeing Transportation, Land (Includes: railroad, scenic and sightseeing)	487110
Port and Harbor Operations (Used railroad ties)	488310
Landscaping Services	561730
Solid Waste Collection	562111
Solid Waste Landfill	562212
Solid Waste Combustors and Incinerators	562213
Marinas	713930
<sup>a</sup> Includes: Major Source Boilers, Area Source Boilers, and Solid Waste Incinerators	
<sup>b</sup> NAICS - North American Industrial Classification System	

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities potentially impacted by this action. This table lists examples of the types of entities which the EPA is aware could potentially be affected by this action. Other types of entities not listed could also be affected. To determine whether your facility, company, business, organization, etc., is affected by this action, you should examine the applicability criteria in this rule. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

## **II. Public Participation**

## A. Written Comments

Submit your comments, identified by Docket ID No. EPA–HQ–OLEM-2020-0550, at <https://www.regulations.gov> (our preferred method), or the other methods identified in the ADDRESSES section. Once submitted, comments cannot be edited or removed from the docket. The EPA may publish any comment received to its public docket. Do not submit to EPA’s docket at <https://www.regulations.gov> any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

Due to public health concerns related to COVID-19, the EPA Docket Center and Reading Room are open to the public by appointment only. Our Docket Center staff also continues to provide remote customer service via email, phone, and webform. Hand deliveries or couriers will be received by scheduled appointment only. For further information and updates on EPA Docket Center services, please visit us online at <https://www.epa.gov/dockets>.

The EPA continues to carefully and continuously monitor information from the Centers for Disease Control and Prevention (CDC), local area health departments, and our Federal partners so that we can respond rapidly as conditions change regarding COVID-19.

## III. Background

### A. *History of the NHSM Rulemakings*

The NHSM regulations establish standards and procedures for identifying when non-hazardous secondary materials burned in combustion units are solid wastes. The RCRA statute

defines “solid waste” as “any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and *other discarded material*...resulting from industrial, commercial, mining, and agricultural operations, and from community activities.” (RCRA section 1004(27) (emphasis added)). The key concept is that of “discard” and, in fact, this definition hinges on the meaning of the phrase “other discarded material,” since this term encompasses all other examples provided in the definition.

The meaning of “solid waste,” as defined under RCRA, is of particular importance as it relates to section 129 of the CAA. If a material or any portion thereof is a solid waste under RCRA, a combustion unit burning it is required to meet the CAA section 129 emission standards for solid waste incineration units. If the material is not a solid waste, combustion units are required to meet the CAA section 112 emission standards. CAA section 129 further states that the term “solid waste” shall have the meaning “established by the Administrator pursuant to the Solid Waste Disposal Act.” *Id* at section 7429(g)(6). The Solid Waste Disposal Act, as amended, is commonly referred to as RCRA.

The Agency first solicited comments on how the RCRA definition of solid waste should apply to NHSMs when used as fuels or ingredients in combustion units in an advanced notice of proposed rulemaking (ANPRM), which was published in the *Federal Register* on January 2, 2009 (74 FR 41). The EPA then published an NHSM proposed rule on June 4, 2010 (75 FR 31844), which the EPA finalized on March 21, 2011 (76 FR 15456).

In the March 21, 2011 rule, the EPA finalized standards and procedures to be used to identify whether NHSMs are solid wastes when used as fuels or ingredients in combustion units. “Secondary material” was defined for the purposes of that rulemaking as any material that is not the primary product of a manufacturing or commercial process, and can include post-consumer material, off-specification commercial chemical products or manufacturing chemical intermediates, post-industrial material, and scrap (codified at 40 CFR 241.2). “Non-hazardous secondary material” is a secondary material that, when discarded, would not be identified as a

hazardous waste under 40 CFR part 261 (codified at 40 CFR 241.2). Traditional fuels, including historically managed traditional fuels (e.g., coal, oil, natural gas) and “alternative” traditional fuels (e.g., clean cellulosic biomass) are not secondary materials and thus, are not solid wastes under the rule unless discarded (codified at 40 CFR 241.2).

A key concept included in the March 21, 2011 rule is that NHSMs used as non-waste fuels in combustion units must meet the legitimacy criteria specified in 40 CFR 241.3(d)(1). Application of the legitimacy criteria helps ensure that the fuel product is being legitimately and beneficially used and not simply being discarded through combustion. To meet the legitimacy criteria, the NHSM must be managed as a valuable commodity, have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy, and contain contaminants or groups of contaminants at concentration levels comparable to (or lower than) those in traditional fuels which the combustion unit is designed to burn.

Based on these criteria, the March 21, 2011 rule identified the following NHSMs as not being solid wastes:

- The NHSM that meets the legitimacy criteria and is used as a fuel and that remains within the control of the generator (whether at the site of generation or another site the generator has control over) (40 CFR 241.3(b)(1));
- The NHSM that meets the legitimacy criteria and is used as an ingredient in a manufacturing process (whether by the generator or outside the control of the generator (40 CFR 241.3(b)(3));
- Discarded NHSM that has been sufficiently processed to produce a fuel or ingredient that meets the legitimacy criteria (40 CFR 241.3(b)(4)); or
- On a case-by-case petition process, NHSM that has been determined to have been handled outside the control of the generator, has not been discarded and is indistinguishable in all relevant aspects from a fuel product, and meets the legitimacy criteria (40 CFR 241.3(c)).



In 2013, the EPA amended the NHSM rules to “clarify several provisions in order to implement the non-hazardous secondary materials rule as the agency originally intended.”<sup>1</sup> While the 2013 final rule did not contain any provisions specific to creosote-treated wood or CTRT, the EPA noted that AF&PA and the American Wood Council submitted a letter with supporting information on December 6, 2012, seeking a categorical non-waste determination for CTRT combusted in any unit.<sup>2</sup> The EPA discussed at the time that the Agency was reviewing the petition and also asked petitioners to provide additional information regarding CTRT, including industry sectors that burn CTRT; types of combustion units; types of traditional fuels that could otherwise be burned in these combustion units; extent of use of CTRT in non-industrial boilers; and laboratory analyses of CTRT for the contaminants, as defined under 40 CFR 241.2, known to be significant components of creosote, such as polycyclic aromatic hydrocarbons. The EPA also provided notice that, assuming the additional information supported the petitioners’ representations, the Agency intended to propose a categorical non-waste fuel determination for CTRT.

On February 8, 2016 (81 FR 6687) , the EPA published final NHSM rule amendments that provided a categorical non-waste fuel determination for CTRT that undergo, at a minimum, metal removal and shredding or grinding and are used as fuel in units designed to burn both biomass and fuel oil as part of normal operations and not solely as part of start-up or shut-down operations.<sup>3</sup> In addition, the final rule included a special provision for units at major source pulp and paper mills or power producers subject to 40 CFR part 63, subpart DDDDD that were designed to burn biomass and fuel oil as part of normal operations, but are modified (e.g., oil delivery mechanisms are removed) in order to use natural gas instead of fuel oil. These units may continue to combust the CTRT as product fuel if the following conditions are met: (A) CTRT

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<sup>1</sup> *Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Final Amendments; Non-Hazardous Secondary Materials That Are Solid Waste; Final Rule.* 78 FR 9112, February 7, 2013.

<sup>2</sup> 78 FR 9173, February 7, 2013.

<sup>3</sup> 81 FR 6723, February 8, 2016.

must be burned in an existing (i.e., commenced construction prior to April 14, 2014) stoker, bubbling bed, fluidized bed, or hybrid suspension grate boilers; and (B) CTRT can comprise no more than 40 percent of the fuel that is used on an annual heat input basis.

A similar categorical non-waste fuel determination approach was applied to creosote-borate and mixtures of creosote and certain non-creosote treated railroad ties (i.e., other treated railroad ties, or OTRT) in the February 7, 2018 NHSM rule amendments.<sup>4</sup>

*B. Summary of the Petitioners' Requested Changes*

The Agency is responding to a rulemaking petition (“the petition”) requesting amendments to the NHSM regulations, initially promulgated on March 21, 2011, and amended on February 7, 2013, February 8, 2016, and February 7, 2018 under the Resource Conservation and Recovery Act (RCRA).

The petition was received on December 7, 2018; petitioners included American Forest and Paper Association (AF&PA), Association of American Railroads (AAR), Treated Wood Council (TWC), American Short Line and Regional Railroad Association (ASLRRA), and American Wood Council (AWC). The petition requested the following amendments to the NHSM regulations: 1) change from mandatory to “should consider” the legitimacy criterion for comparison of contaminants in the NHSM to the traditional fuel the unit is designed to burn found at 40 CFR 241.3(d)(1)(iii); 2) remove associated designed to burn and other limitations for creosote-treated railroad ties found at 40 CFR 241.4(a)(7) – (a)(10); and 3) revise the definition of paper recycling residuals (PRR) that can be burned as non-waste found at 40 CFR 241.2 to remove the limit on non-fiber materials.

*C. Background on Creosote-Treated Railroad Ties (CTRT)*

One outcome that the petitioners seek to achieve with their requested regulatory changes is to expand the national capacity for burning CTRT as non-waste fuel. Creosote was introduced as a wood preservative in the late 1800s to prolong the life of railroad ties. As creosote is a byproduct

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<sup>4</sup> 83 FR 5318-19, February 7, 2018.

of coal tar distillation, and coal tar is a by-product of making coke from coal, creosote is considered a derivative of coal. Approximately 17 million railroad ties are removed from service each year in the U.S. After railroad ties are removed from service, they are transferred for sorting/processing. Based on information provided by industry<sup>5</sup>, the processing of the railroad ties into fuel by the reclamation/processing companies involves several steps. Metals (spikes, nails, plates, etc.) are removed using a magnet, once or several times during the process. The railroad ties are then ground or shredded to a specified size depending on the particular needs of the end-use combustor, with chip size typically between 1–2 inches. This step occurs in several phases, including primary and secondary grinding, or in a single phase. Once the railroad ties are ground to a specific size, additional metal is removed if present and there is further screening based on the particular needs of the end-use combustor. Depending on the configuration of the facility and equipment, screening occurs concurrently with grinding or at a subsequent stage. Throughout the process, a non-toxic surfactant may be applied to the railroad ties being processed to minimize dust. Once the processing of CTRT is complete, the CTRT are sold directly to the end-use combustor for energy recovery.

Use of CTRT as an alternative fuel may have the potential to produce various environmental benefits including reducing fossil fuel use<sup>6</sup>, increasing the heat value of the fuel mix and improving the combustion temperature and conditions.<sup>7</sup> Additionally, combusting CTRT provides an alternative to landfill disposal, which studies have shown may reduce methane emissions from anaerobic decay and extend landfill capacity. Even when accounting for energy recovery of the methane generated from landfill disposal of CTRT, the fuel offset from

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<sup>5</sup> AFPA Rail Tie Petition Request December 6, 2012, EPA-HQ-RCRA-2013-0110-0002.

<sup>6</sup> While creosote is a coal derivative, because the creosote has already been used once as a preservative on railway ties, burning those ties still may reduce the need for burning of fossil fuels.

<sup>7</sup> In addition, one study indicates that co-firing CTRT with coal at 10% the annual heating value may reduce emissions of certain pollutants. However, that study is very limited and cannot be extrapolated to the use of CTRT as a fuel in general. Little is known about impacts of variability in CTRT or coal composition and how these would impact emissions for any given combustor design or control device configuration. For more information, see *Creosote Treated Railroad Ties and Coal Co-firing Technical Support Document*, available in the docket.

combusting CTRT for energy recovery is estimated to be 20 times greater than energy recovery from landfill gas.<sup>8</sup>

However, as noted in the 2011 NHSM final rule, creosote is produced from the process of distillation of coal tar for the purpose of creating a wood preservative, not a fuel, and creosote has different chemical concentrations than coal. In particular, CTRT has elevated levels of hexachlorobenzene, a CAA 112 Hazardous Air Pollutant (HAP), as well as other HAPs, when compared to coal. (76 FR 15483, March 21, 2011). Thus the 2016 NHSM non-waste determination is limited to CTRTs that are used as fuel in specific types of units where CTRTs have contaminants at levels comparable to or lower than the traditional fuel that combustion units are designed to burn.

In addition, the EPA has also recently become aware of reported problems associated with processing CTRT for use as fuel. Grinding CTRT can create dust that may blow onto neighboring properties. Processing CTRT into fuel can also be associated with other, more-generalized issues like excess noise from grinding, loud night-time operations, and the smell of creosote. These issues, combined with public concerns, led the Georgia state legislature to ban the combustion of CTRT for commercial electricity generation in June 2020.<sup>9</sup> The public complaints that prompted this legislative action were associated with two power plants that received modified permits allowing them to combust fuel oil and CTRT in 2018.<sup>10</sup> Since that time, the Georgia Environmental Protection Division received at least 23 complaints related to these combustors at the two plants.<sup>11</sup> About half of these complaints involved the smell of creosote or smoke and air quality concerns; issues associated with dust, excess noise, and runoff were also alleged five times each. Five complaints attributed headaches and burning eyes and airways to the effect of creosote combustion at the plants.

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<sup>8</sup> Bolin and Smith, “Creosote-Treated Ties End-of-Life Evaluation”, p. 9.

<sup>9</sup> H.R. 857, 150<sup>th</sup> Gen Assemb., Reg. Sess. (Georgia 2020).

<sup>10</sup> See Permit Amendment Nos. 4911-195-0020-E-01-1 and 4911-119-0025-E-04-1 available in the docket.

<sup>11</sup> See *Compilation of Citizen Complaints Regarding Combustion of Creosote-Treated Railroad Ties* available in the docket.

Based on EPA discussions with Georgia Environmental Protection Division, it appears that inefficient boiler operations, particularly during start-up and shut-down operations, (which were subsequently corrected) and CTRT grinding were most likely to blame for the community complaints.<sup>12</sup> Notably, the large majority of complaints were associated with the facility where grinding operations took place. Additionally, the Georgia legislation banning CTRT combustion for commercial energy generation created an exemption for any boiler that “also provides steam or electricity to any co-located forest products processing plant.”<sup>13</sup> This provision was added to the legislation to allow a CTRT-combusting paper mill in southern Georgia to continue its operations because it had not prompted similar citizen complaints.<sup>14</sup>

As was done in Georgia, state and local governments have authority under their state solid waste and water programs, as well as local ordinances, to address citizen complaints associated with the management and processing of CTRT prior to their use as a non-waste fuel, including problems associated with dust, excess noise, and runoff. CTRT remain solid waste until processed to produce a non-waste fuel per 40 CFR 241.3(b)(4) and thus remain under such solid waste regulatory authority. In addition, a federal non-waste determination under 40 CFR part 241 does not affect a state's authority to regulate a non-hazardous secondary material as a solid waste under the state's RCRA Subtitle D solid waste management program.

It remains unclear how frequently CTRT processing causes community concerns and how processors and state and local governments have responded. EPA is aware of a handful of cases outside of Georgia in which similar concerns were raised by communities where CTRT grinding takes place,<sup>15</sup> but EPA lacks comprehensive information on the frequency and extent of such issues and challenges. These environmental concerns may impact a material's classification as an

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<sup>12</sup> See *June 30, 2020 Georgia EPD Meeting Summary* available in the docket.

<sup>13</sup> H.R. 857, 150<sup>th</sup> Gen Assemble. Reg. Sess. (Georgia 2020).

<sup>14</sup> March 5, 2020 hearing before the Ga. House Natural Resources and Environment Comm., 2019-2020 Reg. Sess. (2020) (Statement of Alan Powell). See <https://livestream.com/accounts/25225474/events/8737135/videos/202562457> at 13:30.

<sup>15</sup> See *Compilation of Citizen Complaints Regarding Combustion of Creosote-Treated Railroad Ties* available in the docket.

NHSM. In order to fulfill the “valuable commodity” legitimacy criterion required of NHSM burned as fuel (40 CFR 241.3(d)(1)(i)), the material must be “managed in a manner consistent with the analogous fuel or otherwise be adequately contained to prevent releases to the environment.” Likewise, when no analogous fuel exists, the material must be “adequately contained so as to prevent releases to the environment. EPA is requesting comment on CTRT processing to help the Agency determine whether it is standard practice to manage CTRT intended for combustion as an NHSM in a manner that fulfills the “valuable commodity” legitimacy criterion by preventing environmental releases.

Specifically, EPA is requesting public comment on the potential health and environmental risks associated with managing and processing CTRT prior to combustion and potential approaches to addressing these issues. Information on the types of control methods or devices available, their efficacy, and their practicality may assist the Agency in making decisions regarding CTRT processing in the future. Useful comments may include information such as industry standards, best management practices (BMPs) or standard operating procedures (SOPs), and state or local regulations or ordinances regarding dust containment. In addition, the Agency is requesting comment on the location of CTRT grinding facilities and whether the communities surrounding them face the risk of bearing an undue cumulative environmental health burden. Moreover, EPA is also requesting comment on other sources of environmental pollution and demographic trends (especially regarding vulnerable populations) in the vicinity of CTRT management locations.

#### **IV. EPA Response to Petitioners’ Requested Changes**

##### *A. Request to change the contaminant comparison criterion from mandatory to “should consider”*

###### *1. Petitioners’ Request*

40 CFR 241.3(d)(1)(iii) currently states that, “The non-hazardous secondary material must contain contaminants or groups of contaminants at levels comparable in concentration to or

less than those in traditional fuel(s) that the combustion unit is designed to burn.” Petitioners requested the following revision in the regulatory language: “Persons should *consider* whether the non-hazardous secondary material contains contaminants or groups of contaminants at levels comparable in concentration to or lower than those in traditional fuel(s) that the combustion unit is *capable* of burning. ... *The factor in this paragraph does not have to be met for the non-hazardous secondary material to be considered a non-waste fuel.*” [emphasis added].

Petitioners’ rationale for this suggested change focused on a July 7, 2017 decision by the U.S. Court of Appeals for the D.C. Circuit that rejected mandatory compliance with the contaminant comparison criterion portion of the legitimacy test in the context of the RCRA rules defining “solid wastes” under RCRA’s Subtitle C hazardous waste program (“DSW rule”). *American Petroleum Institute v. Environmental Protection Agency*, 862 F.3d 50 (D.C. Cir. 2017) (“*API*”). Petitioners argued that, in light of the Court’s DSW rule decision, the continued mandatory use of contaminant comparison criterion in the NHSM rule, including limiting railroad tie non-waste fuel classifications to certain types of combustion units, can no longer be justified.

Petitioners referenced preamble language the EPA used in the 2015 DSW final rule regarding the contaminant comparison criterion, and said that “[t]his language is consistent with the Identification of Non-Hazardous Secondary Materials that are Solid Wastes final rule (76 FR 15456, March 21, 2011).” (80 FR 1727, January 13, 2015) From this preamble language petitioners concluded that the EPA has acknowledged the equivalence of the contaminant comparison factors in the two rules (i.e., Factor 4 in the DSW rule and third legitimacy criterion in the NHSM rule).

In 2017, the *API* Court invalidated the fourth factor in the DSW rule, finding that “[n]ever in the rulemaking does EPA make out why a product that fails those criteria is likely to be discarded in any legitimate sense of the term.” 862 F.3d at 62. Petitioners say that the Court also

challenged the EPA’s “bare assertion that high levels of hazardous constituents . . . could indicate discard,” and noted that the contaminant comparison at issue was “not a reasonable tool for distinguishing products from wastes.” *Id* at 60, 63 (internal quotes omitted).

Petitioners argued that the *API* holding, with its critique of the EPA’s application of this element of the definition of legitimate recycling in the DSW rule, applies with equal force to the NHSM legitimacy criteria set forth at 40 CFR 241.3(d). See *id* at 63. Therefore, petitioners alleged that, based on the reasoning and holding in *API*, the contaminant comparison criterion currently contained in the NHSM rule’s legitimacy criteria and the corresponding NHSM rules for railroad ties treated with creosote and other wood preservatives can no longer be used as mandatory elements to determine whether a secondary material is discarded or not.

Furthermore, petitioners asserted that the EPA has recognized that the contaminant comparison should not be a determining factor for whether a material is being discarded. In its 2016 Rule on Additions to List of Categorical Non-Waste Fuels, the EPA expressly noted that “CTRTs do not become wastes solely because of the switch to natural gas.” 81 Fed. Reg. 6687, 6731 (Feb. 8, 2016). In that rule, the EPA reasoned that facilities that have demonstrated the ability to burn fuel oil and biomass should not be penalized for switching to natural gas, a fuel that creates less air pollution. In addition, petitioners stated that the EPA properly determined that resinated wood should qualify as a categorical non-waste fuel under the NHSM rule, despite expressly recognizing that this material “may not meet the regulatory contaminant legitimacy criteria in every situation” (78 FR 9112, 9156, February 7, 2013). Petitioners claimed that this prior EPA precedent is fully consistent with the Court’s decision in *API* and underscores the need to eliminate the contaminant comparison as a mandatory factor in the NHSM rule’s legitimacy criteria generally, and as a condition as applied to individual NHSMs.

## 2. *EPA Response*



The argument that the 2017 *API* decision invalidates the contaminant comparison criterion for NHSM fails because the contaminant standards in each rule were established for different purposes and in different contexts. The DSW rule establishes standards for legitimate recycling of hazardous secondary materials into products. The exclusions in the DSW rule address reclamation and specifically omit burning for energy recovery. Unlike NHSMs, hazardous secondary materials that are burned for energy recovery are always solid waste, unless the material is a commercial chemical product that is itself a fuel. (*See* 40 CFR 261.2(c)(2)). The contaminant comparison in 40 CFR 260.43(b) compares hazardous constituents in the product of the recycling process to the corresponding constituents in the analogous product made from virgin material. While 40 CFR 260.43(b) specifies that this factor “does not have to be met for the recycling to be considered legitimate,” the regulation also explains that “[i]n evaluating the extent to which this factor is met and in determining whether a process that does not meet this factor is still legitimate, persons can consider exposure from toxics in the product, the bioavailability of the toxics in the product and other relevant considerations.” In other words, the definition of legitimate recycling in 40 CFR 260.43, as it relates to hazardous constituents, focuses on the effect those hazardous constituents have on the risks posed by the product of recycling.

In contrast, the NHSM rule was established solely to determine whether an NHSM that is combusted as a fuel or an ingredient is a waste or a non-waste for purposes of applying appropriate emission standards under CAA section 129 or CAA section 112. Without the contaminant criterion, an NHSM could contain contaminant levels that are significantly higher than the traditional fuels they are meant to replace and still be considered a non-waste fuel. Burning is an inherently destructive process, even if there is energy recovery. Thus, through the NHSM rules, the Agency evaluates whether burning an NHSM for energy recovery also has the effect of destroying contaminants that would not otherwise be present in the corresponding traditional fuel, indicating discard may be occurring.

NHSM standards for categorical non-wastes also differ significantly from the DSW rule because the NHSM standards allow consideration of “other relevant factors” in determining whether the contaminant comparison criterion is met. (*See* 40 CFR 241.4(b)(5)(ii)). Thus, the NHSM standards already provide flexibility to meet the contaminant comparison criterion, where appropriate. The *API* court’s rejection of the mandatory contaminant comparison for hazardous wastes in the DSW rule turned, in large part, on what the court viewed as a rigid and severe standard. The court felt that the requirement “sets the bar at the contaminant level of the analogue without regard to whether any incremental contaminants are significant in terms of health and environmental risks.” 862 F.3d at 60. However, the court went on to commend an exception to that test in which a recycler could satisfy this legitimacy criterion with evidence of “lack of exposure from toxics in the product, lack of the bioavailability of toxins in the product, or other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk.” *Id.* (quoting 40 CFR 260.43(a)(4)(iii) (2016)). Ultimately, the court found the exception to be insufficient “due to the draconian character of the procedures.” *Id.* at 61. That is, if a recycler failed to satisfy any step in the exception process, an otherwise legitimate product would be considered to be hazardous waste. The NHSM regulations avoid these problems by allowing the Agency to consider “other relevant factors,” which offers flexibility without the “draconian” procedures of the 2015 DSW rule.

Therefore, for all of the reasons stated above, the *API* decision does not directly apply because the context of burning NHSM differs fundamentally from hazardous waste recycling.

Finally, we also note that the NHSM legitimacy criteria have been in place since 2011 and were upheld by the D.C. Circuit Court in *Solvay v. EPA*. 608 Fed. Appx. 10 (D.C. Cir. 2015) (45 ELR 20107 Nos. 11-1189, (D.C. Cir., 06/03/2015)). A substantive change to the contaminant comparison criterion that would allow NHSM generators to “consider” significantly higher levels of contaminants in their NHSM-derived fuel, without any threshold or indication of when

such a consideration might result in an NHSM being a solid waste, would create regulatory uncertainty for the combustion units that burn this material and rely on an accurate non-waste determination for their CAA permit applicability determinations. The Agency is, therefore, proposing to deny the Petitioners' request regarding the contaminant comparison criterion.

*B. Request to remove associated designed to burn and other limitations for creosote-treated railroad ties*

*1. Petitioners' Request*

As discussed above, 40 CFR 241.3(d)(1)(iii) states that “[t]he non-hazardous secondary material must contain contaminants or groups of contaminants at levels comparable in concentration to or less than those in the traditional fuel(s) that the combustion unit *is designed to burn...*” (emphasis added). As currently applied, the petitioners believe the designed to burn criterion means that the exact same railroad tie is considered a solid waste when burned in one unit, but a non-waste fuel when burned in another. The petition stated that the EPA has acknowledged the character of the NHSM does not change depending on the design of the boiler it goes to, and has offered no rationale for how the existence of a fuel oil nozzle in a boiler (*i.e.*, a boiler originally designed to burn fuel oil, but later retrofitted to burn natural gas) informs the question of whether railroad ties are being legitimately used as fuel, or in fact are simply being discarded in a hypothetical “sham recycling” operation.

In addition, petitioners argued, the EPA has imposed other restrictions unrelated to the characteristics of the NHSM itself— including a requirement that the facility in question must have been built before April 2014 and that the amount of NHSM combusted in that facility may not exceed 40% of the total fuel mix in a given year. Petitioners claimed that, in adding these various requirements regarding the characteristics of the combustion unit, the characteristics of the material and the motivation of the recycler are essentially rendered irrelevant to the determination of whether the material is a solid waste. Petitioners felt that this is contrary to

RCRA case law and an arbitrary and unreasonable basis on which to decide whether the material is, in fact, being discarded or legitimately used as fuel.

Petitioners indicated that, as the agency charged with environmental protection, the EPA should encourage the widespread use of railroad ties and other similarly situated NHSM as fuel, rather than restrict that use and condemn valuable fuel sources to landfills. Furthermore, the Petitioners stated that the regulatory revisions requested in the Petition promote environmental sustainability, consistent with the EPA's Waste Management Hierarchy, eliminate undue and burdensome regulation, and reduce costs associated with such regulatory burdens.

According to a survey conducted jointly by the Railway Tie Association, ASLRRA and the AAR, railroads removed an average annual total of 23,975,000 railroad ties as part of track upgrade projects in the period from 2013 to 2016. The survey indicated that railroads sent 81.3% of those railroad ties to cogeneration facilities. As asserted in the joint comments previously submitted by AAR, TWC, and AF&PA on January 3, 2017, the designed to burn criterion disqualified approximately 58% of the existing boiler capacity to burn these railroad ties. Petitioners noted this capacity limitation means it takes much longer to move ties through the fewer eligible facilities, and railroads must transport the ties longer average distances to reach an eligible facility.

The primary alternative for managing the large volume of railroad ties removed from the rail lines each year is landfill disposal. According to petitioners, if substantial numbers of ties are excluded from the scope of what can be burned for energy generation in lieu of fossil fuels, the result will be an increased use of non-renewable fuels and an increase in the volume of ties sent to landfills. As the landfilled ties decay, they release greenhouse gases—including methane—into the Earth's atmosphere, an outcome that petitioners argued is contrary to public policy and the EPA's stated goals.

Further, at a cost of \$70 to \$90 per ton, petitioners projected that landfilling the additional railroad ties will cost railroads an additional \$74 to \$95 million per year.<sup>16</sup> Petitioners argue that reduction of these burdensome and unnecessary costs is consistent with Executive Order 13771 and the EPA's August 17, 2018 memorandum reinforcing the work of the EPA's Regulatory Reform Task Force.

## *2. EPA Response*

Regarding petitioners' claim that the same NHSM is treated differently in different units, such a claim ignores the underlying premise of the NHSM rules, which is to determine whether an NHSM that is combusted is a waste or a non-waste for purposes of applying appropriate emission standards under CAA section 129 or CAA section 112 to the unit burning the NHSM. Thus, it is entirely appropriate that an NHSM would be considered a non-waste fuel when burned in a unit designed to burn a comparable traditional fuel, and a solid waste when burned in a unit that is not designed to burn a comparable traditional fuel. Contaminants or groups of contaminants in the NHSM must occur at levels comparable to or lower than those in the traditional fuel the unit is designed to burn. Under 40 CFR 241.4(a)(7)(i) and (8)(i), each unit must be designed to burn both biomass and fuel oil, since contaminant levels in CTRT (*e.g.*, SVOCs) are considerably higher than biomass alone. Without the designed to burn criterion, contaminant levels could be compared to any traditional fuel or combination of fuels, resulting in a unit burning contaminants under the boiler provisions in CAA section 112 that the unit would otherwise never have been eligible to handle.<sup>17</sup>

It should be noted that as a result of the 2013 NHSM rule, the regulations already provide considerable flexibility in implementing the designed to burn criterion. Persons making

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<sup>16</sup> EPA notes that there are other options to landfilling CTRTs, including using them as fuel in units that are in compliance with CAA 129 and landscaping; see Smith, Stephen T., "2018 Railroad Tie Survey," <https://www.rta.org/assets/docs/RTASponsoredResearch/Environmental/2019-4-9%20Tie%20Survey%20Report%20Final.pdf>.

<sup>17</sup> This issue would be a concern even under the petitioners' requested change to make the contaminant comparison criterion "to be considered" rather than mandatory.

contaminant level comparisons may choose a traditional fuel that can be or is burned in the particular type of boiler, whether or not the combustion unit is permitted to burn that traditional fuel. Broad groups of similar traditional fuels may be used when comparing contaminant levels (e.g., coal, biomass, fuel oil, and natural gas). The regulatory language in 40 CFR part 241 makes it clear that a unit is considered designed to burn a traditional fuel if it is physically capable of burning the fuel, regardless of whether it has burned, or is permitted to burn, such a fuel.

Petitioners suggest replacing language in the CTRT rules regarding which units are “designed to burn” CTRT with units “operating in compliance with all applicable permits.” However, the NHSM rules are used to determine which CAA permits are applicable to a unit combusting NHSM, making the suggested reference to “applicable permits” circular and meaningless.

In regards to petitioners’ comments on EPA’s decision to include in the non-waste determination CTRT burned as fuel in units at major source pulp and paper mills or power producers subject to 40 CFR part 63, subpart DDDDD that had been originally designed to burn biomass and fuel oil, but had switched to natural gas (*see* 40 CFR 241.4(7)(ii)<sup>18</sup>, the EPA could have reasonably limited the contaminant comparison to the much lower contaminant levels in natural gas. However, as part of the Agency’s authority to consider “other relevant factors” in making a categorical non-waste fuel determination in cases where one of the legitimacy criteria is not met (*See* 40 CFR 241.4(b)(5)(ii)), the Agency elected to include units that no longer burn fuel oil to avoid “penalizing” the converted units that switched to cleaner-burning fuel.<sup>19</sup> Conditions imposed on CTRT combusted in natural gas-fired units are part of the relevant factors the EPA used to determine whether discard has occurred (*see* 81 FR 6724-25).

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<sup>18</sup> EPA is neither reopening nor taking comment on these regulations.

<sup>19</sup> 81 FR 6724, February 8, 2016.

The designed to burn criterion is fundamental to the NHSM program since it is the primary mechanism for identifying which traditional fuel should be used as the basis of determining whether contaminant levels in the NHSM are comparable to or less than the traditional fuel being replaced. Without the designed to burn criterion, CTRT could be combusted in biomass-only boilers, including biomass boilers that are area sources under the CAA. These boilers would have higher emissions when burning CTRT rather than biomass. Emission standards for dioxins, SO<sub>2</sub>, NO<sub>x</sub>, etc. for non-major sources are addressed under the CAA section 129 standards but are not addressed by area source boiler standards under CAA section 112 which require only tune-ups. The Agency is therefore proposing to deny petitioners' request regarding the designed to burn criterion. See section IV.A. above for a discussion on the contaminant comparison criterion.

### *C. Preamble Discussion of Storage Times for Railroad Ties*

#### *1. Petitioners' Request*

In addition to the requested regulatory changes, the petition raises an issue related to railroad tie storage timeframes as it impacts NHSM eligibility as discussed in the 2016 NHSM rule. In the preamble to that rule, the EPA discussed its presumption that storage of ties for a year or longer without an end-use determination is not "reasonable," and indicates that the material has been discarded. Petitioners asserted that this is incompatible with the realities of railroad operations. That is, unlike discrete facilities from which valuable secondary materials are easily reclaimed, the railroad right-of-way extends over thousands of miles across the United States. Petitioners said that many locations where ties are removed are not readily accessible except by rail and tie pickup interrupts freight and passenger train service and competes with safety-related operations such as track maintenance and inspection. Train service and safety are regulated by the Surface Transportation Board and Federal Railroad Administration, respectively. Petitioners indicated that, due in part to those agencies' requirements, service and safety must take precedence over tie recovery. Petitioners asserted that these challenges make it unrealistic to

collect used ties within one year of removal from service—but for reasons completely unrelated to the determination of whether ties are managed as a “valuable commodity” under the NHSM framework. Moreover, the EPA has recognized that “the reasonable timeframe for storage may vary by industry” (81 FR 6725, February 8, 2016). In the context of railroad tie management, petitioners asserted that three or more years is a reasonable storage timeframe.

## *2. EPA Response*

Regarding storage time for CTRT (to meet the valuable commodity criterion), petitioners misinterpreted the preamble discussion in the February 8, 2016 rule, which explained that the amount of time for industry to decide on value and end use of CTRT (whether sent to a landfill, used as fuel, or another non-fuel purpose) could exceed one year (81 FR 6725). In such circumstances, lengthy storage of the treated railroad ties generally occurs because the railroad has not determined the end use of the ties, not because the ties are being stored for later transfer to a pre-established buyer. Further, CTRT would be considered discarded until processed into a non-waste fuel, since NHSMs that are transferred off-site for reclamation and reuse as a fuel are considered discarded and must be processed and meet the legitimacy criteria.

The general reasoning for this off-site standard is that the incentive for management of the NHSM as a valuable fuel product is lessened when transferred to a third party. To be considered a non-waste fuel when transferred off-site without first undergoing processing, the material would have to undergo the petition process under 241.3(c) to demonstrate that the material has not been discarded. EPA continues to find, as noted in the 2016 rule, that railroad ties removed from service can be stored for long periods of time without a final determination regarding their final end use, and they are considered discarded. In order for these ties to be considered a non-waste fuel, they must be processed, thus transforming the railroad ties into a product fuel, and then combusted in prescribed units under prescribed conditions.

## *D. Request to Amend the Definition of “Paper Recycling Residuals”*



### *1. Petitioners' Request*

Petitioners also requested that the EPA amend the definition of “paper recycling residuals” (PRR) to amend the description and remove the definitional condition that PRR that “contain more than *small amounts* of non-fiber materials . . . are not paper recycling residuals” (40 CFR 241.2, emphasis added). Petitioners believed that this condition is overly vague and directly at odds with the Court’s decision in *API*.

Petitioners requested that the second sentence in the definition precluding materials that contain “more than small amounts of non-fiber materials” from qualifying as PRR should be removed. They argued that this condition suggests that the list of non-fiber materials identified in the definition are somehow viewed as contaminants in PRR. But, as discussed above, petitioners argue that in vacating the contaminant comparison criterion in the DSW rule, the D.C. Circuit made clear that the mere presence of some contaminants in a material destined for legitimate recycling is not the basis for finding that the material has been “discarded” and thus subject to regulation as a solid waste.

In addition to arguing that this condition is inconsistent with the D.C. Circuit’s holding in *API*, the petitioners believe that the “small amount” limitation is overly vague. While members of the regulated community have used good faith efforts in determining that PRR burned as fuel meet this condition, it is well established that “a statute which either forbids or requires the doing of an act so vague that men of common intelligence must necessarily guess at its meaning and differ as to its applications, violates the first essential of due process of law.” *FCC v. Fox Television Stations, Inc.*, 567 U.S. at 239, 253 (2012) (internal citation omitted). According to petitioners, the “small amount” criterion in the definition of PRR falls squarely within this “impermissibly vague” infirmity and should be removed from the definition to help ensure that “those enforcing the law do not act in an arbitrary or discriminatory way.” *FCC*, 567 U.S. at 253 (internal citation omitted).

Furthermore, petitioners argue that the current definition describing PRR as “composed primarily of wet strength and short wood fibers” is not correct as the re-pulping of recovered fibers can result in a variety of strengths and sizes of fibers in PRR, so the current limitation to “wet strength and short wood fibers” is unnecessarily restrictive. Some residuals from recycling paper, paperboard and corrugated containers are composed of fibers other than wet strength fibers or short-wood fibers, but nonetheless cannot be used to make new paper or paper products and therefore are burned for their energy value.

## *2.. EPA Response*

EPA disagrees with the petitioner’s arguments for removing language limiting the amount of non-fiber materials in PRR burned as a non-waste fuel. The reasoning for not including the non-fiber materials as PRR was not focused on discard due to contaminants present, but rather, discard due to lack of heating value and not contributing to energy recovery. In the April 14, 2014 proposed rule, the EPA requested, but did not receive, information regarding the percent of non-fiber materials commonly present in PRR and their heating value (79 FR 21017). Lacking information to the contrary, the Agency determined that PRR with higher amounts of non-fiber materials would likely have a lower heating value. Combustion of materials with low heating values is typically be considered discard. PRR already has a relatively low heating value (as fired and generated, average 3,700 Btu/lb)<sup>20</sup>, so large amounts of non-fiber materials would lower the heating value of the material, further raising the question of burning as discard.

In the review of the petition, the Agency reaffirms the previous conclusion that residuals from processes such as mixed paper waste recycling with significant quantities of non-fiber materials (e.g., clays, starches, waxes and adhesives, other plastics, filler and coating additives,

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<sup>20</sup> 81 FR 6716, February 8, 2016.

and dyes and inks) are considered to be a solid waste fuel when combusted, due to a lack of meaningful heating value.<sup>21</sup>

However, the EPA does believe that it may be more appropriate to set a numerical threshold for non-fiber material, rather than prohibit them entirely or rely on the term “small amounts.” As indicated above, information on such threshold amounts of non-fiber materials was not received from industry and a review of current scientific studies also did not reveal specific amounts. As an alternative, although not directly used for PRR as fuels, the Scrap Specifications Circular (2021); Institute of Scrap Recycling Industries Guidelines for Paper Stock identifies a 2% prohibitive material content limit for mixed paper stock used for re-pulping paper.<sup>22</sup> In the circular, prohibitive material is material which by its presence, in excess of the amount allowed, will make the pack unusable as the grade specified, as well as any materials that may be damaging to equipment. In evaluating the grades of paper identified in the circular, the maximum allowance of prohibitive materials in mixed paper (which consists of all paper and paperboard of various qualities not limited to the type of fiber content) is 2%. The Agency has concluded that this prohibitive material measure can provide an analogous measure for non-fiber materials contained within PRR.

Furthermore, the definition of PRR as “composed of primarily wet strength and short wood fibers” was based on previously submitted industry information (81 FR 6721, February 8, 2016). However, based on the information submitted in this petition, the Agency agrees that the reference to “primarily wet strength and short wood fibers” is too limiting and inadvertently excludes fibers of different strength and size that may provide heating value, and therefore we are proposing to change the language to “fibers that are too small or weak to be used to make new paper and paperboard products.”

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<sup>21</sup> 81 FR 6718, February 8, 2016.

<sup>22</sup> Institute of Scrap Recycling Industries (ISRI) Scrap Specifications Circular (2021), page 34; <http://www.scrap2.org/specs/>.

Accordingly, the Agency proposes to revise the definition of PRR as follows: paper recycling residuals (PRR) means the secondary material generated from the recycling of paper, paperboard and corrugated containers composed primarily of fibers that are too small or weak to be used to make new paper and paperboard products. Residuals that contain more than 2% by weight of non-fiber materials, including polystyrene foam, polyethylene film, other plastics, waxes, adhesives, dyes and inks, clays, starches and other coating and filler material are not PRR under this definition.

## **V. Effect of This Final Rule on Other Programs**

Beyond amending the definition of PRR, this tentative denial does not change the effect of the NHSM regulations on other programs as described in the March 21, 2011 NHSM final rule, as amended on February 7, 2013 (78 FR 9138), February 8, 2016 (81 FR 6688) and February 7, 2018 (83 FR 5317). Refer to section VIII of the preamble to the March 21, 2011 NHSM final rule<sup>23</sup> for the discussion on the effect of the NHSM rule on other programs.

## **VI. State Authority**

### *A. Relationship to State Programs*

This tentative denial and proposed change to the definition of PRR does not change the relationship to state programs as described in the March 21, 2011 NHSM final rule. Refer to section IX of the preamble to the March 21, 2011 NHSM final rule<sup>24</sup> for the discussion on state authority including, “Applicability of State Solid Waste Definitions and Beneficial Use Determinations” and “Clarifications on the Relationship to State Programs.” The Agency, however, would like to reiterate that this proposed rule (like the March 21, 2011 and the February 7, 2013 final rules) is not intended to interfere with a state’s program authority over the general management of solid waste.

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<sup>23</sup> 76 FR 15456, March 21, 2011 (page 15545)

<sup>24</sup> 76 FR 15456, March 21, 2011 (page 15546)

### *B. State Adoption of the Rulemaking*

No federal approval procedures are included in this rulemaking action under RCRA subtitle D. While states are not required to adopt regulations promulgated under RCRA subtitle D, some states incorporate federal regulations by reference or have specific state statutory requirements that their state program can be no more stringent than the federal regulations. In those cases, the EPA anticipates that, if required by state law, the changes being made in this document will be incorporated (or possibly adopted by authorized state air programs) consistent with the state's laws and administrative procedures.

## **VII. Costs and Benefits**

This action is definitional in nature, and any costs or benefits accrue to the corresponding Clean Air Act rules. In accordance with the Office of Management and Budget (OMB) Circular A-4 requirement that the EPA analyze the costs and benefits of regulations, the EPA prepared a regulatory impact analysis document for the proposal that examines the scope of indirect impacts.

## **VIII. Statutory and Executive Order Reviews**

Additional information about these statutes and Executive Orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

### *A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review*

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review because it may raise novel policy issues. Any changes made in response to OMB recommendations have been documented in the docket.

### *B. . Paperwork Reduction Act (PRA)*

This action does not impose any new information collection burden under the PRA as this action only changes the definition of PRR for the purposes of the NHSM regulations. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2050-0205.

*C. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, EPA concludes that the impact of concern for this rule is any significant adverse economic impact on small entities and that the Agency is certifying that this rule will not have a significant economic impact on a substantial number of small entities because the rule has no net burden on the small entities subject to the rule. While this proposed action will provide greater clarity, reduce regulatory uncertainty associated with paper recycling residuals, and help increase management efficiency, it would not change the substantive requirements of the regulations. The proposed 2% limit for non-fiber material in PRR that would replace the current limit of “small amounts” is based on a voluntary consensus standard set by the Institute of Scrap Recycling Industries (ISRI) in their Scrap Specifications and would not require a change in current industry practices. We have therefore concluded that this action will have no net regulatory burden for all directly regulated small entities.

*D. . Unfunded Mandates Reform Act (UMRA)*

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The costs involved in this action are imposed only by participation in a voluntary federal program. UMRA generally excludes from the definition of “Federal intergovernmental mandate” duties that arise from participation in a voluntary Federal program. Affected entities are not required to manage the additional NHSMs as non-waste fuels.

*E. . Executive Order 13132: Federalism*

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

*F. . Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have tribal implications as specified in Executive Order 13175. It will neither impose substantial direct compliance costs on tribal governments, nor preempt tribal law. Potential aspects associated with the categorical non-waste fuel determinations under this proposed rule may invoke minor indirect tribal implications to the extent that entities generating or consolidating these NHSMs on tribal lands could be affected. However, any impacts are expected to be negligible. Thus, Executive Order 13175 does not apply to this action.

*G. . Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks*

This action is not subject to Executive Order 13045 because it is not economically significant as defined in the Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The change to the definition of PRR would not affect the overall risk to children posed by boiler emissions. This is because the overall level of emissions, or the emissions mix from boilers, are not expected to change significantly because of the change in definition of PRR and these units remain subject to the protective standards established under CAA section 112.

*H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*

This action is not a “significant energy action” because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. The selected NHSMs affected by this proposed action would not be generated in quantities sufficient to significantly (adversely or positively) impact the supply, distribution, or use of energy at the national level. Even if 100% of the available PRR were converted to energy (an unlikely best-case scenario), that would translate to a potential increase of only 0.002% to 0.003% in the national energy supply, and these effects would be localized at recycling paper mills.

*I. National Technology Transfer and Advancement Act (NTTAA)*

This action involves technical standards. The EPA proposes to use a 2% by weight limit on the amount of non-fiber content allowed in paper recycling residuals (PRR) when burned as a non-waste fuel. This is based on a voluntary consensus standard set by the Institute of Scrap Recycling Industries (ISRI) in their Scrap Specifications Circular (2021); which identifies a 2% prohibitive material content limit for paper stock used for re-pulping paper. See page 34; <http://www.scrap2.org/specs/>. In the circular, prohibitive material is material which by its presence, in excess of the amount allowed, will make the pack unusable as the grade specified, as well as any material that may be damaging to equipment. In evaluating the grades of paper identified in the circular, the maximum allowance of prohibitive materials in mixed paper (which consists of all paper and paperboard of various qualities not limited to the type of fiber content) is 2%. The Agency proposes that this prohibitive material measure can provide an analogous measure for allowable amounts of non-fiber materials (including polystyrene foam, polyethylene film, other plastics, waxes, adhesives, dyes and inks, clays, starches and other coating and filler material) contained within PRR.

*J. . Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*



The EPA believes that this action, if finalized, would not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). The proposed change in definition of PRR is not expected to significantly change the overall level of emissions, or the emissions mix from boilers, and these units remain subject to the protective standards established under CAA section 112.

However, if EPA were to grant the petitioners' requests, CTRT could be combusted in biomass-only boilers, including biomass boilers that are area sources under the CAA. As discussed earlier, these boilers would have higher emissions when burning CTRT rather than biomass. Emission standards for dioxins, SO<sub>2</sub>, NO<sub>x</sub>, etc. for non-major sources are addressed under the CAA section 129 standards but are not addressed by area source boiler standards under CAA section 112 which require only tune-ups. The risks from increased emissions would most likely be disproportionately borne by minority and low-income communities. In areas within three miles of boilers, the minority share of the population was found to be 33 percent, compared to the national average of 25 percent. For these same areas, the percent of the population below the poverty line (16 percent) is also higher than the national average (13 percent).

## **List of Subjects in 40 CFR part 241**

Environmental protection, Air pollution control, Waste treatment and disposal, Non-Hazardous Secondary Materials.

Michael S. Regan,

Administrator.

For the reasons stated in the preamble, the EPA is proposing to amend 40 CFR part 241 of the Code of Federal Regulations as follows:

**PART 241—SOLID WASTES USED AS FUELS OR INGREDIENTS IN  
COMBUSTION UNITS**

1. The authority citation for part 241 continues to read as follows:

**Authority:** 42 U.S.C. 6903, 6912, 7429.

2. Amend § 241.2 by revising the definition of “paper recycling residuals” to read as follows:

**§ 241.2 Definitions.**

\* \* \* \* \*

*Paper recycling residuals (PRR)* means the secondary material generated from the recycling of paper, paperboard and corrugated containers composed primarily of fibers that are too small or weak to be used to make new paper and paperboard products. PRR that contain more than 2% by weight of non-fiber materials, including polystyrene foam, polyethylene film, other plastics, waxes, adhesives, dyes and inks, clays, starches and other coating and filler material are not PRR under this definition.

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